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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,950	04/08/2004	David W. Knoble	ZK522/03054	9708
27868	7590	11/23/2005	EXAMINER	
JOHN F. SALAZAR MIDDLETON & REUTLINGER 2500 BROWN & WILLIAMSON TOWER LOUISVILLE, KY 40202			TRUONG, BAO Q	
			ART UNIT	PAPER NUMBER
			2875	

DATE MAILED: 11/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/820,950	Applicant(s) KNOBLE ET AL	
	Examiner Bao Q. Truong	Art Unit 2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>08/04/2005</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to; the word "comprises" should be changed to --has/includes--. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-6 and 12-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Chinniah et al. [US 2003/0235046].

Regarding claims 1, 12 and 17, Chinniah et al. discloses an LED light spreader having a series of partial cylindrical lengths [between 50] and partial frustoconical lengths [at 50] forming an elongated member with a rounded surface and a light emitting surface [36] (figures 1, 2 and 11).

Regarding claims 2 and 20, Chinniah et al. discloses the elongated member being a transparent material (paragraph [0033]).

Regarding claims 3, 16 and 21, Chinniah et al. discloses the rounded surface being coated with a reflective material [at 50] (figures 1-2).

Regarding claims 4 and 19, Chinniah et al. discloses a semicircular light gathering end [40] (figures 1-2).

Regarding claim 5, Chinniah et al. discloses the light emitting surface [36] being planar (figure 2)

Regarding claim 6, Chinniah et al. discloses the light emitting surface being concave [202] (figure 11).

Regarding claims 13, 14 and 18, Chinniah et al. discloses the final section ends being planar/point [at 46] (figures 1-2).

Regarding claim 15, Chinniah et al. discloses 6 series of sections (figure 2).

4. Claims 7-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Shimura et al. [US 6,712,492].

Regarding claim 7, Shimura et al. discloses an elongated LED light spreader formed of a light-transmissible material having a light conducting end [8], an optical path conversion side [14, 15, 16], and a planar light transmitting side [13] (figures 1 and 11).

Regarding claim 8, Shimura et al. discloses the light spreader being a plastic translucent material (figure 11).

Regarding claim 9, Shimura et al. discloses a reflective material [28] (figures 1 and 11).

Regarding claim 10, Shimura et al. discloses the light conductive end [8] being planar (figure 1).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shimura et al. [US 6,712,492] in view of Chinniah et al. [US 2003/0235046].

Regarding claim 11, Shimura et al. discloses a light conductive end [8] (figures 1 and 11) but does not disclose the light conductive end being concave.

Chinniah et al. discloses a light conductive end [140] being concave (figures 3-4, paragraph [0037]).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the light conductive end of Shimura et al. with a concave end as taught by Chinniah et al. to converge more light to the reflective surface for purpose of increasing light output at the emitting surface.

Conclusion

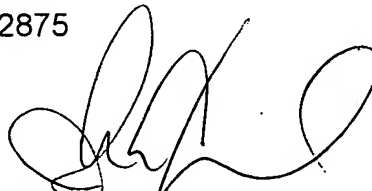
7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Bucher et al. [US 6,471,379] (Figures 4-6) and Smith [US 5,772,304] disclose a light spreader.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bao Q. Truong whose telephone number is (571) 272-2383. The examiner can normally be reached on Monday-Friday (8:00 AM - 4:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra L. O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Bao Q. Truong
Examiner
Art Unit 2875



JOHN ANTHONY WARD
PRIMARY EXAMINER